

REMARKS

In the Office Action mailed December 24, 2003 the Examiner noted that claims 17, 19, 30, 32, 41 and 43 were pending, and rejected all claims. Claims 17, 19, 30, 32, 41 and 43 have been amended, and, thus, in view of the forgoing claims 17, 19, 30, 32, 41 and 43 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections are traversed below.

In the Office Action the Examiner rejected claims 17, 30 and 41 under 35 U.S.C. section 112 paragraph 2 as indefinite. The claims have been amended in consideration of the Examiner's comments and it is submitted they satisfy the requirements of the statute. If additional concerns with the claims arise, the Examiner is invited to telephone to resolve the same. Suggestions by the Examiner are also welcome. Withdrawal of the rejection is requested.

On page 2 of the Office Action, the Examiner rejected claim 19, 32 and 43 under 35 U.S.C. section 102 as anticipated by Wang.

Wang is directed to a system that discriminates text lines of a document. In Wang a document image is divided into columns and each column is divided into rectangular unit areas (see col. 5, lines 23 -47). A rectangular unit is deleted if the height is shorter than 3 pixels or taller than the average height times a tolerance factor (see col. 5, line 65 - col. 6, line 10). That is, Wang deletes only rectangular units larger than a certain threshold value. In contrast, the present invention deletes a straight line pattern of plural segment patterns are larger than a threshold value ("deleting a straight line pattern composed of segment patterns which are larger than a threshold value, among the one or more straight line patterns, when sizes of all of the segment patterns are greater than the threshold value" - claim 19). Wang does not teach or suggest this. Claims 32 and 43 also emphasize this feature.

It is submitted that the present claimed invention of claims 19, 32 and 43 patentably distinguishes over Wang and withdrawal of the rejection is requested.

Page 3 of the Office Action rejects claims 17, 30 and 41 under 35 U.S.C. § 103 over Wang and Abe.

The discussions by Wang are noted above.

Abe is directed to detecting line segments and predefined patterns present in picture data obtained by optically scanning a document. Abe (see figure 1B) expands the area occupied by a line segment to encompass noise components and then erases the expanded

areas (see col. 9, line 61 - col. 10, line 68). As depicted in figure 1C, Abe also determines an adjoining relationship of several vertical and horizontal line segments. Abe also determines the size and location of each table, block and line pattern in the document which cross, connect or form corners. Abe does not mention much less address deciding whether to delete a straight line of a pair based on a ratio between an overlap between patterns and one of the patterns ("deleting a shorter pattern of two straight line patterns which are included in the one or more straight line patterns and overlap when a ratio of a length of an overlapping portion to a length of the shorter pattern is greater than a threshold value" - claim 17). Wang also does not does not teach or suggest this. Claims 30 and 41 also emphasize this feature.

It is submitted that the invention of independent claims 17, 30 and 41 distinguishes over the prior art and withdrawal of the rejection is requested.

It is submitted that the claims satisfy the requirements of 35 U.S.C. section 112, paragraph 2. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

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